

Integers

1. Write down the number that is 6 lower than 4
Write down the number that is 6 lower than -4
Write down the number that is 7 lower than -2
Write down the number that is 8 lower than 1
Write down the number that is 6 higher than 4
Write down the number that is 6 higher than -4
Write down the number that is 9 higher than -5
Write down the number that is 9 higher than -10



2. What is the difference between

9 and -6 7 and -8 4 and -4 3 and -5 -5 and -4 -6 and -12

3. Calculate (a) $7 + 2$ (b) $(-7) + 2$ (c) $(-7) + 10$ (d) $(-3) + 5$
 (e) $(-1) + 6$ (f) $(-6) + 15$ (g) $(-20) + 30$ (h) $(-10) + 7$
 (i) $(-32) + 15$ (j) $(-23) + 100$ (k) $5 - 3$ (l) $(-7) - 9$

4. Jeremiah was born in 37BC and lived until he was 62 years old.
In which year did he die?



5. A diver is 25m below sea-level.

(a) A wreck lies at the bottom of the sea 65m below the diver. How deep is the sea?

(b) A helicopter hovers at a height of 30m. It is directly above the diver.

What is the distance between the helicopter and (i) the diver? (ii) the wreck?

6. Put these numbers in order starting with the lowest:

(a) 2, -4, 5, $-3 \cdot 5$, -2, 0, 1, $-4 \cdot 5$, -6 (b) 6, 9, -5, -2, 4, -4, 7, -10, 8

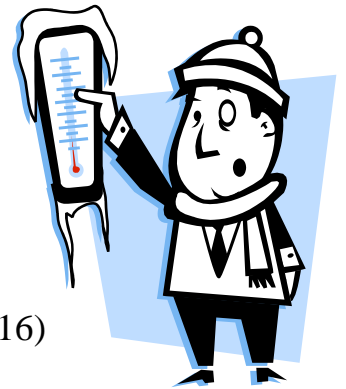
7. Calculate: (a) $12 + (-30)$ (b) $(-16) + (-16)$ (c) $(-4) - 10$ (d) $41 - 52$
(e) $13 + (-5)$ (f) $(-5) + (-18)$ (g) $(-12) - 7$ (h) $30 - 49$

8. Calculate: (a) $6 + 4 + (-2)$ (b) $(-21) + (-14) - 7$ (c) $(-5) - 8 + (-10)$

9. The temperatures one week in Glencoe were -3°C , -1°C , -6°C , -7°C , -9°C , -10°C , -6°C
Calculate the average temperature.

10. The temperatures at one week in Glasgow were -2°C , -3°C , -5°C , -2°C , -5°C , -10°C , -8°C
Calculate the average temperature.

11. What is the difference between: (a) (-2) and (-5) (b) 5 and (-8)
(c) 19 and (-23) (d) (-8) and (-16)



12. Calculate: (a) $(-2) - (-5)$ (b) $15 - (-2)$ (c) $(-3) - (-1)$ (d) $(-7) + (-9)$
(e) $(-5) - (-3)$ (f) $19 - (-12)$ (g) $0 - (-8)$ (h) $4 - (-3) + 5$

13. Find the missing number:

(a) $? + 4 = -5$ (b) $? - 8 = -6$ (c) $? + 9 = -1$
(d) $? - 5 = -12$ (e) $2 + ? = -2$

14. Calculate:
- | | | |
|------------------|-----------------|--------------|
| (a) $(-6) + 9$ | (b) $(-4) - 3$ | (c) $6 - 10$ |
| (d) $(-7) + 4$ | (e) $(-1) - 1$ | (f) $4 - 13$ |
| (g) $(-17) + 6$ | (h) $(-2) - 11$ | (i) $1 - 23$ |
| (j) $(-10) + 10$ | (k) $(-2) - 9$ | (l) $1 - 13$ |

15. State whether true or false:

- 10
- | | | | | |
|---------------|--------------|----------------|---------------|--------------|
| (a) $4 < -3$ | (b) $2 > -2$ | (c) $-3 < 0$ | (d) $7 < -1$ | (e) $8 >$ |
| (f) $-7 > -8$ | (g) $4 < 5$ | (h) $12 > -13$ | (i) $-5 < -6$ | (j) $-1 < 0$ |

16. Put $<$ or $>$ between each pair:
- | | | |
|-------------------|--------------------|-------------------|
| (a) $0 \quad -3$ | (b) $-7 \quad -10$ | (c) $4 \quad 5$ |
| (d) $-3 \quad -9$ | (e) $0 \quad 2$ | (f) $-6 \quad -2$ |
| (g) $3 \quad -3$ | (h) $2 \quad 5$ | |

17. The temperature in London at 2pm was 16°C but at 2am it had dropped to -4°C . What was the difference in temperature over the 12 hours?

18. Find the difference in temperature between Glasgow at 2°C and Edinburgh at -5°C .

19. The temperature in London at 2pm was 23°C but at 2am it had dropped to -9°C . What was the difference in temperature over the 12 hours?

20. Find the difference in temperature between Glasgow at 8°C and Edinburgh at -3°C .